

## INTISARI

**Latar belakang:** Sirosis hati masih menjadi problem kesehatan utama di dunia, karena merupakan penyakit fibrosis hati yang mempunyai risiko komplikasi. Pemeriksaan biopsi hati masih merupakan baku emas dalam penegakan diagnosis sirosis hati, tetapi pemeriksaan ini invasif dan subjektif. Metode secara tidak langsung dan non invasif untuk menilai tingkat keparahan penyakit sirosis hati akhir-akhir ini dievaluasi seperti skor *Child Pugh*, dalam hasilnya tidak terdapat keseragaman (inkonsisten). Penelitian ini mengukur kadar *Malondialdehyde* (MDA) sebagai parameter aktivitas radikal bebas di dalam jaringan hepar yang dapat digunakan untuk menilai tingkat keparahan pada pasien sirosis hati.

**Tujuan:** Menilai hubungan kadar serum MDA terhadap skor *Child-Pugh* pada pasien sirosis hati.

**Metode:** Penelitian ini menggunakan rancangan observasional *cross sectional* (potong lintang), yang dalam rancangan ini dicari korelasi antara kadar serum MDA terhadap skor *Child-Pugh* pada pasien sirosis hati. Korelasi *Pearson* yang digunakan untuk hubungan kadar serum MDA terhadap skor *Child-Pugh* pada pasien sirosis hati.

**Hasil:** Dari 35 pasien sirosis hati umur rerata 53,7 th, laki-laki terbanyak 25 pasien (71,4%) dan penyebab terbanyak Hepatitis B kronik 15 pasien (42,8%), skor *Child Pugh* B terbanyak 15 pasien (42,9%), kadar MDA rerata 24,6 µg/mL. Kadar rerata MDA tertinggi pada skor *Child Pugh* C yaitu 35,8 µg/mL. Terdapat korelasi positif antara kadar serum MDA dengan skor *Child Pugh* pada pasien sirosis hati, dengan nilai  $r=0,671$  dan  $p=0,000$ .

**Kesimpulan:** Terdapat korelasi positif kuat dan bermakna antara kadar serum MDA dengan skor *Child Pugh* pada pasien sirosis hati.

**Kata kunci:** *Malondialdehyde*, Skor *Child-Pugh*, Sirosis Hati.

## ABSTRACT

**Background:** Liver cirrhosis still a major health problem in the world, because it is a disease of liver fibrosis are at risk of complications. Liver biopsy is still the gold standard to diagnose cirrhosis of the liver, but it can be invasive and subjective bias. Indirect and noninvasive method as Child Pugh score evaluated, and there were inconsistency on the result. This study measured the levels of Malondialdehyde (MDA) as the parameters of free radical activity in the liver tissue that can be used to assess the severity of liver cirrhosis patients.

**Aim:** The purpose of this study was to assess the relationship of serum MDA levels to Child-Pugh score in patients with liver cirrhosis.

**Methods:** This study used a cross-sectional observational design (cross-sectional), which in this design sought correlations between serum levels of MDA to the Child-Pugh score in patients with liver cirrhosis. Pearson correlations were used for the relationship of serum levels of MDA to the Child-Pugh score in patients with liver cirrhosis.

**Results:** Of the 35 patients with liver cirrhosis mean age of 53.7 years, most of the male 25 patients (71.4%) and the most common cause of chronic hepatitis B 15 patients (42.8%), the highest score of Child Pugh B 15 patients (42.9 %), the mean MDA levels of 24.6 mg/mL. The highest average levels of MDA in Child Pugh score C was 35.8 mg/mL. There was a positive correlation between serum MDA levels with Child Pugh score in patients with liver cirrhosis, with  $r = 0.671$  and  $p = 0.000$ .

**Conclusion:** There was a strong and significant positive correlation between serum MDA levels with Child Pugh score in patients with liver cirrhosis.

**Keywords :** Malondialdehyde, Child-Pugh scores, Liver Cirrhosis.